

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:)	Examiner: Nguyen, J.
)	
Slothower et al.)	Art Unit: 2629
)	
Serial No. 09/774,990)	Conf. No.: 4362
)	
Filed: January 30, 2001)	
)	
For: INTEGRATED ENCLOSURE/ TOUCH SCREEN ASSEMBLY)	
)	

APPEAL BRIEF (Amended)

This Appeal Brief is amended in response to the Notification of Non-Compliant Appeal Brief mailed on December 4, 2008. Only Section 5 ("Summary of Claimed Subject Matter") is amended; for completeness, the entire Appeal Brief is submitted although not required.

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1. Real Party in Interest

The real party in interest is Palm, Inc.

2. Related Appeals and Interferences

There are no related appeals or interferences known to the Appellant.

3. Status of Claims

Claims 1-20 are pending. Claims 1-20 are rejected under 35 U.S.C. § 103(a). This appeal involves Claims 1-20.

4. Status of Amendments

An amendment has not been filed subsequent to the final rejection.

5. Summary of Claimed Subject Matter

With reference to Figures 2 and 3, independent Claim 1 describes a touch screen assembly 220 that is integrated with a cover piece 210/310 (page 11, lines 18-21). Significantly, the cover piece 210/310 is a single piece (page 11, line 13). The touch screen assembly 220 includes a display mechanism 340 and a digitizer mechanism 330 (page 12, lines 19-23). The digitizer mechanism can be activated via contact with the cover piece 210/310 (page 13, lines 16-21). As claimed, the cover piece 210/310 is disposed over and fully encloses the top and sides of the touch screen assembly 220, and has endpoints that are coincident with the bottom surface of the touch screen assembly (Figure 3). In other words, the cover piece 210/310 itself is open at the bottom, but when the cover piece is integrated with the touch screen assembly 220, the edges of the open bottom of the cover piece are coincident with the bottom of the touch screen assembly

(Figure 3). The cover piece 210/310 forms a seal to protect the digitizer mechanism (page 11, lines 21-22).

With reference to Figures 2 and 3, independent Claim 9 describes a touch screen assembly 220 that is integrated with a cover piece 210/310 (page 11, lines 18-21). Significantly, the cover piece 210/310 is a single piece (page 11, line 13). The touch screen assembly 220 includes a display mechanism 340 and a digitizer mechanism 330 (page 12, lines 19-23). As claimed, the cover piece 210/310 is disposed over and fully encloses the top and sides of the touch screen assembly 220, and has endpoints that are coincident with the bottom surface of the touch screen assembly (Figure 3) in order to form a seal to protect the digitizer mechanism (page 11, lines 21-22). The digitizer mechanism can be activated via contact with the cover piece 210/310 (page 13, lines 16-21). In other words, the cover piece 210/310 itself is open at the bottom, but when the cover piece is integrated with the touch screen assembly 220, the edges of the open bottom of the cover piece are coincident with the bottom of the touch screen assembly (Figure 3). The touch screen assembly 220 also includes a support structure 305 that supports the display mechanism 340, the digitizer mechanism 330 and the cover piece 210/310 (page 13, lines 1-2).

With reference to Figures 5 and 6, independent Claim 16 describes a display assembly 520 that includes a digitizer mechanism 620 disposed over a flat display screen 625 (page 15, lines 9-11). A bezel-less cover piece 530/610 is disposed over the top surface of the digitizer mechanism 620 (page 15, lines 6-10). Significantly, the top surface of the cover piece 530/610 is coincident with the top surface of a supporting structure 605 (page 14, lines 16-18 and 20-21).

The digitizer mechanism can be activated via contact with the cover piece 530/610 (page 16, lines 1-7).

In the following, reference is made to the elements of Figures 2, 3, 5 and 6.

According to Claims 2 and 17, the cover piece 210/310 or 530/610 is constructed using in-mold decoration (page 11, line 24).

According to Claims 3 and 10, the cover piece 210/310 is formed from a thermoplastic outer film that is coupled (e.g., fused, affixed or adhered) with the film layer 320 of the digitizer mechanism 330 (page 12, lines 8-14).

According to Claims 4 and 11, finger pressure on the external surface of the cover piece 210/310 activates the digitizer mechanism 330 (page 13, lines 18-21).

According to Claims 5 and 12, stylus pressure on the external surface of the cover piece 210/310 activates the digitizer mechanism 330 (page 14, lines 9-12).

According to Claim 6, the cover piece 210/310 is formed from a mylar polycarbonate material (page 12, lines 13-14).

According to Claims 7, 14 and 20, the cover piece 210/310 can be deflected in order to activate the digitizer mechanism 330/620 (page 13, lines 16-18).

According to Claims 8 and 15, the cover piece 210/310 has a flat outer top surface free of indentations (page 11, lines 17-18).

According to Claims 13 and 18, the digitizer mechanism 330 includes a resistive-type digitizing element (page 12, line 19).

According to Claim 19, the cover piece 530/610 is formed from a thermoplastic outer film that is coupled with the film layer 615 of the digitizer mechanism 620 (page 14, lines 18-19; page 15, lines 7-9).

6. Grounds of Rejection to be Reviewed on Appeal

Claims 1-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA) in view of Takahata et al. ("Takahata," U.S. Patent No. 6,556,189).

7. Arguments

A. The following arguments are applicable to Claims 1-15, which are rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA and Takahata.

According to independent Claims 1 and 9, a touch screen assembly is integrated with a single-piece cover. As claimed, the single cover piece is

disposed over and fully encloses the top and sides of the touch screen assembly, and has endpoints that are coincident (e.g., flush or level) with the bottom surface of the touch screen assembly. In other words, according to the claimed structure, a single cover piece encloses the top and four sides of the touch screen assembly but not the bottom – that is, the single cover piece is open at the bottom, and the edges of the opening are coincident with the bottom of the touch screen assembly when the cover piece is joined with the touch screen assembly.

Appellant respectfully agrees with the statement on page 2 of the final rejection, to the effect that AAPA does not show or suggest these claimed features. Specifically, Appellant submits that AAPA does not show or suggest “a single piece cover enclosure for said touch screen assembly that is disposed over and fully encloses the top and sides of said touch screen assembly that has endpoints that are coincident with a bottom surface of said touch screen assembly ... wherein said single piece cover enclosure forms a seal to protect said digitizer mechanism” as recited in independent Claim 1 and as similarly recited in independent Claim 9. AAPA’s protective film 110 (Figure 1) does not fully enclose the top and sides of the touch screen assembly, does not have endpoints that are coincident with the bottom surface of the touch screen assembly, and does not serve as a single piece that forms a seal, in contrast to the claims.

Appellant respectfully submits that Takahata, alone or in combination with AAPA, also does not show or suggest the claim limitations cited above. The embodiments described in Takahata’s Figures 1-4 and 7-8, even when

considered in combination with AAPA, do not show or suggest the claimed structure. The embodiments described in Takahata's Figures 9 and 11, even in combination with AAPA, also do not show or suggest the claimed structure. In these embodiments, the cover pieces are made up of multiple pieces; there is not a single cover piece that fully encloses the top and sides of the touch screen assembly, that has endpoints that are coincident with the bottom surface of the touch screen assembly, and that forms a seal, in contrast to the claims.

Figure 10 of Takahata is relied upon to teach the limitations of independent Claims 1 and 9 that are not taught by AAPA. However, as clearly stated in Takahata, "the touch panel is wrapped in a bag" (column 10, lines 25-28 and lines 43-49; emphasis added). That is, as evidenced by Figure 10, Takahata's touch panel is completely enclosed by the surrounding bag 43; the bag has no endpoints and, as such, it has no endpoints that are coincident with the bottom surface of the touch screen assembly. As such, Appellant respectfully submits that Takahata, alone or in combination with AAPA, does not show or suggest "a single piece cover enclosure for said touch screen assembly ... that has endpoints that are coincident with a bottom surface of said touch screen assembly ... wherein said single piece cover enclosure forms a seal to protect said digitizer mechanism" as recited in independent Claim 1 and as similarly recited in independent Claim 9.

On page 3, the final rejection states: "Although Takahata teaches the single piece cover enclosure has endpoints that are coincident with a side of said touch screen (fig. 10) [sic]. However, the location of the endpoint is a matter of

designer's choice and it would have been obvious to obtain the endpoints that are coincident with a bottom surface of said touch screen ...".

Appellant disagrees that the claimed limitations are merely a matter of design choice and obvious in light of Takahata in combination with AAPA. Takahata discloses many different embodiments but, alone or in combination with AAPA, does not show or suggest the embodiments of the present claimed invention as recited in independent Claims 1 and 9. Appellant respectfully submits that the claimed invention represents a patentably distinct departure from the teachings of the combination of AAPA and Takahata. Appellant respectfully submits that there is no showing or suggestion in either AAPA or Takahata or the combination thereof of a cover piece that partially encloses yet seals a touch screen assembly in the manner claimed. Appellant respectfully asserts that the final rejection presents a strained interpretation of the prior art references, in particular Takahata, and that such an interpretation could be made only by impermissible hindsight gleaned from the Appellant's own disclosure.

Appellant respectfully submits that it would be necessary to make modifications, not taught in the references, in order to combine the references in a manner that meets the claims. For example, in order to meet the claims, either the cover pieces described by AAPA or by Takahata's Figures 1-4 and 7-8 would have to be increased in size and reshaped, or the cover pieces described by Takahata's Figures 9-11 would have to be cut and fit. Yet neither AAPA nor Takahata contains a showing or suggestion of such modifications or how they would be accomplished while still achieving a sealed environment for the touch screen assembly. Again, Appellant respectfully submits that such a showing or

suggestion can be made only by hindsight gleaned from the Appellant's own disclosure, and such hindsight is impermissible.

In summary, Appellant respectfully submits that the basis for rejecting independent Claims 1 and 9 under 35 U.S.C. § 103(a) is traversed and that Claims 1 and 9 are allowable over AAPA and Takahata.

Each of the Claims 2-8 includes all of the limitations of Claim 1 plus additional limitations. Each of the Claims 10-15 includes all of the limitations of Claim 9 plus additional limitations. Appellant respectfully submits that AAPA and Takahata, alone or in combination, do not show or suggest the limitations of Claims 2-8 and 10-15 in combination with the limitations of their respective base claim. Appellant further submits that Claims 2-8 and 10-15 are in condition for allowance as depending from allowable claims. As such, Appellant respectfully submits that the basis for rejecting Claims 2-8 and 10-15 under 35 U.S.C. § 103(a) is traversed and that these claims are allowable over AAPA and Takahata.

B. The following arguments are applicable to Claims 16-20, which are rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA and Takahata.

Appellant respectfully notes that the final rejection does not address the specific limitations of independent Claim 16. In the final rejection, Claim 16 is grouped with Claims 1 and 9, even though Claim 16 recites limitations that are different from and not encompassed by the limitations of Claims 1 and 9.

According to independent Claim 16, a display assembly includes a digitizer mechanism and a bezel-less cover piece disposed over the top surface of the digitizer mechanism. As claimed, the top surface of the cover is coincident (e.g., flush or level) with the top surface of a supporting structure.

Appellant respectfully submits that AAPA does not show or suggest these claimed features. Specifically, Appellant submits that AAPA does not show or suggest “a bezel-less cover element disposed over a top surface of said digitizer mechanism that has a top surface that is coincident with the top surface of a supporting structure of said bezel-less cover element” as recited in independent Claim 16. As show in Figure 1 of the instant application, there can be a step-down corner 150 from the upper edge of the support structure to the upper surface of the outermost protective film.

Figure 10 of Takahata is relied upon to teach the limitations of independent Claim 16 not taught by AAPA. However, Appellant respectfully submits that the embodiment described in Takahata’s Figure 10, as well as the embodiments described in Takahata’s Figures 1-4, 7-9 and 11, do not show or suggest the claimed structure, even when Takahata is considered in combination with AAPA. None of Takahata’s embodiments appear to show or suggest a cover element, defined as it is defined in Claim 16 (that is, disposed over and coupled to a top surface of a digitizer mechanism, wherein contact with the cover element activates the digitizer mechanism), that has a top surface coincident with the top surface of a supporting structure. Appellant respectfully submits that elements of Takahata, such as the upper electrode film 1 or the upper

transparent electrode 3, do not constitute cover elements. Also, the top surface of Takahata's upper film 6 is not coincident with the top of a supporting structure, but instead appears to be on top of any supporting structure. Additionally, Takahata's bag 43 is not coincident with the top of a supporting structure, but instead appears to wrap around any supporting structure.

Appellant respectfully submits that it would be necessary to make modifications, not taught in the references, in order to combine the references in a manner that meets Claim 16. For example, in order to meet the claims, either the cover pieces described by AAPA or by Takahata's Figures 1-4 and 7-8 would have to be reconfigured, or the cover pieces described by Takahata's Figures 9-11 would have to be cut and fit. Yet neither AAPA nor Takahata contains a showing or suggestion of such modifications. Appellant respectfully submits that such a showing or suggestion can be made only by hindsight gleaned from the Appellant's own disclosure, and such hindsight is impermissible.

In summary, Appellant respectfully submits that the basis for rejecting independent Claim 16 under 35 U.S.C. § 103(a) is traversed and that Claim 16 is allowable over AAPA and Takahata.

Each of the Claims 17-20 includes all of the limitations of Claim 16 plus additional limitations. Appellant respectfully submits that AAPA and Takahata, alone or in combination, do not show or suggest the limitations of Claims 17-20 in combination with the limitations of Claim 16. Appellant further submits that Claims 17-20 are in condition for allowance as depending from allowable claims. As such, Appellant respectfully submits that the basis for rejecting Claims 17-20

under 35 U.S.C. § 103(a) is traversed and that these claims are allowable over AAPA and Takahata.

8. Conclusions

Appellant believes that Claims 1-20 traverse the basis for rejection under 35 U.S.C. § 103(a).

Appellant respectfully requests that the rejections of Claims 1-20 be reversed.

Respectfully submitted,

MURABITO HAO & BARNES LLP

Dated: December 10, 2008

/William A. Zarbis/

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Appendix I – Clean Copy of Claims on Appeal

1. (Previously Presented) An integrated enclosure/touch screen assembly comprising:

a display mechanism;

a digitizer mechanism comprising a protective component and a digitizing element; and

a single piece cover enclosure for said touch screen assembly that is disposed over and fully encloses the top and sides of said touch screen assembly that has endpoints that are coincident with a bottom surface of said touch screen assembly wherein said digitizing element can be activated by contact made along the external surface of said single piece cover enclosure, and wherein said single piece cover enclosure forms a seal to protect said digitizer mechanism.

2. (Original) An integrated enclosure/touch screen assembly according to Claim 1 wherein said single piece cover enclosure is constructed using in mold decoration.

3. (Previously Presented) An integrated enclosure/touch screen assembly according to Claim 1 wherein a soft thermoplastic outer film is coupled to said protective component of said digitizer mechanism by in mold decoration to form said single piece cover enclosure.

4. (Original) An integrated enclosure/touch screen assembly according to Claim 1 wherein finger pressure on the external surface of said single piece cover enclosure can be used to activate said digitizer mechanism.

5. (Original) An integrated enclosure/touch screen assembly according to Claim 1 wherein stylus pressure on the external surface of said single piece cover enclosure may be used to activate said digitizer mechanism.

6. (Original) An integrated enclosure/touch screen assembly according to Claim 1 wherein said single piece cover comprises a mylar polycarbonate material.

7. (Original) An integrated enclosure/touch screen assembly according to Claim 3 wherein said soft thermoplastic film has sufficient deflection under external pressure to active said digitizer mechanism.

8. (Original) An integrated enclosure/touch screen assembly according to Claim 1 wherein said single piece cover enclosure for said display mechanism and said digitizer mechanism is constructed with a flat outer top surface free of any indentation.

9. (Previously Presented) An integrated enclosure/touch screen assembly comprising:

- a display mechanism;
- a digitizer mechanism comprising a protective component and a digitizing element;
- a single piece cover enclosure that fully encloses the top and sides of said touch screen assembly that has endpoints that are coincident with a bottom

surface of said touch screen assembly wherein said single piece cover enclosure forms a seal to protect said digitizer mechanism; and

a supporting structure for supporting said display mechanism, said digitizer mechanism and said single piece cover enclosure, wherein said digitizer element is activated by contact made along the external surface of said single piece cover enclosure.

10. (Previously Presented) An integrated enclosure/touch screen assembly according to Claim 9 wherein said single piece cover enclosure is a soft thermoplastic outer film that is coupled to said protective component of said digitizer mechanism and to said supporting structure.

11. (Original) An integrated enclosure/touch screen assembly according to Claim 9 wherein finger pressure on the external surface of said single piece cover enclosure may be used to activate said digitizer mechanism.

12. (Original) An integrated enclosure/touch screen assembly according to Claim 9 wherein stylus pressure on the external surface of said single piece cover enclosure may be used to activate said digitizer mechanism.

13. (Original) An integrated enclosure/touch screen assembly according to Claim 9 wherein said digitizing element of said digitizer mechanism is a resistive type digitizing element.

14. (Original) An integrated enclosure/touch screen assembly according to Claim 10 wherein said soft thermoplastic film has sufficient deflection under external pressure to activate said digitizer mechanism.

15. (Previously Presented) An integrated enclosure/touch screen assembly according to Claim 10 wherein said single piece cover enclosure is coupled to both said protective component of said digitizer mechanism and to said supporting structure to provide a flat outer top surface free of any indentation.

16. (Previously Presented) A display assembly for a portable electronic device comprising:

a flat panel display screen;

flat panel, clear, digitizer mechanism disposed over said flat panel display screen; and

a bezel-less cover element disposed over a top surface of said digitizer mechanism that has a top surface that is coincident with the top surface of a supporting structure of said bezel-less cover element wherein said bezel-less cover element and said top surface of said digitizer mechanism are coupled and wherein contact made along said top surface of said bezel-less cover element activates said digitizer mechanism.

17. (Original) A display assembly as described in Claim 16 wherein said cover is constructed using in mold decoration process.

18. (Original) A display assembly as described in Claim 16 wherein said digitizer mechanism is a resistive type digitizing element.

19. (Previously Presented) A display assembly as described in Claim 16 wherein said cover is a soft thermoplastic outer film that is coupled to said protective component of said digitizer mechanism.

20. (Original) A display assembly as described in Claim 19 wherein said soft thermoplastic film has sufficient deflection under external pressure to activate said digitizer mechanism.

Appendix II – Evidence

There is no evidence entered and relied upon in this appeal.

Appendix III – Related Proceedings

There are no proceedings identified as related appeals and interferences.